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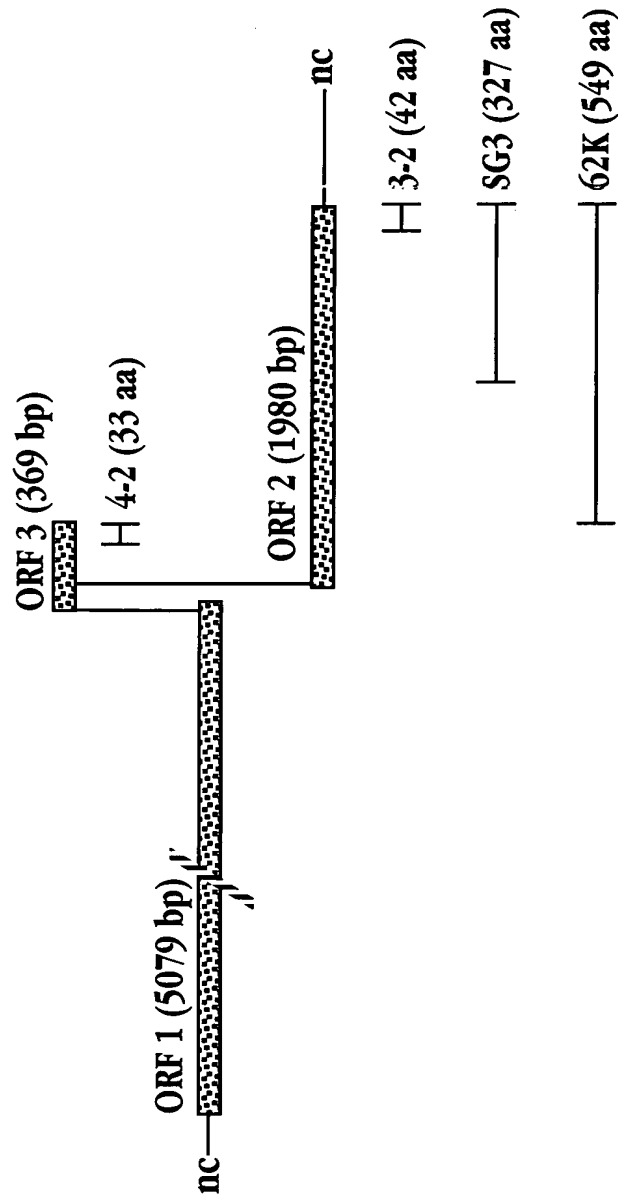


Fig. 1

	I-ORF3-->			I-ORF2-->		
	5110v	5120v	5130v	5140v	5150v	5160v
-BURMA	TGGAATGAATAACATGTCTTTTGTCTGCGCCCATGGGTTTCGCGACCATGCGCCCTCGGCCT					
-MEXICO	GAATGAATAACATGT TTTGCTGCGCCCATGGGTTTCG ACCATGCGCCCT GGCCT CTGAATGAATAACATGTGGTTTGTCTGCGCCCATGGGTTCCGCCACCATGCGCCCTAGGCCT					
	5170v	5180v	5190v	5200v	5210v	5220v
-BURMA	ATTTTGTGCTGCTCCTCATGTTTTTGCTATGCTGCCCCGCGCCACCGCCCGGTTCAGCCG					
-MEXICO	TTTTG TG TG TCCTC TGTTT TGCCTATG TGCCCCGCGCCACCG CCGGTTCAGCCG CTTTTGTCTGTTGTTCTCTTGTCTTCTGCTATGTTTGCCCCGCGCCACCGACCGGTTCAGCCG					
	5230v	5240v	5250v	5260v	5270v	5280v
-BURMA	TCTGGCCGCGCGTCGTGGGCGGCGCAGCGGCGGTTCGGCGGTGGTTTTCTGGGGTGACCCG					
-MEXICO	TCTGGCCGCGCGTCGTGGGCGGCGCAGCGGCGGT CCGGCGGTGGTTTTCTGGGGTGACCCG TCTGGCCGCGCGTCGTGGGCGGCGCAGCGGCGGTACGGCGGTGGTTTTCTGGGGTGACCCG					
	5290v	5300v	5310v	5320v	5330v	5340v
-BURMA	GTTGATTCTCAGCCCTTCGCAATCCCTATATTTCATCCAACCAACCCCTTCGCCCCCGAT					
-MEXICO	GTTGATTCTCAGCCCTTCGCAATCCCTATATTTCATCCAACCAACCCCTT GCCCC GA GTTGATTCTCAGCCCTTCGCAATCCCTATATTTCATCCAACCAACCCCTTTGCCCCAGAC					
	I-406.4-2-->					
	5350v	5360v	5370v	5380v	5390v	5400v
-BURMA	GTCACCGCTGCGGCCGGGCTGGACCTCGTGTTCGCCAACC CGCCGACCACTCGGCTCC					
-MEXICO	GT CCGCTGCG CCGGG CTGGACCTCG TTGCCAACC GCCCG CCACT GGCTCC GTTGCCGCTGCGTCCGGGTCTGGACCTCGCCTTCGCCAACCAGCCCGGCCACTTGGCTCC					
	5410v	5420v	5430v	5440v	5450v	5460v
-BURMA	GCTTGGCGTGACCAGGCCAGCGCCCCGCGGTTGCCTCAGCTCGTAGACCTACCACAGCT					
-MEXICO	CTTGGCG GA CAGGCCAGCGCCCC CCG TGCCTC CGTCG GACCT CCACAGC ACTTGGCGAGATCAGGCCAGCGCCCCCTCCGCTGCCTCCCGTCGCCGACCTGCCACAGCC					
	<--406.4-2-I					
	<-ORF3--I					
	5470v	5480v	5490v	5500v	5510v	5520v
-BURMA	GGGGCCGCGCCGCTAACCGCGGTCTGCTCCGGCCCATGACACCCCGCCAGTGCCTGATGTC					
-MEXICO	GGGGC GCG CGCT AC GC GT GC CC GCCCATGACACC C CC GT CC GA GT GGGGCTGCGGCGCTGACGGCTGTGGCGCCTGCCCATGACACCTCACCCGTCCCGGACGTT					
	5530v	5540v	5550v	5560v	5570v	5580v
-BURMA	GACTCCCGCGCGCCATCTTGCGCCGGCAGTATAACCTATCAACATCTCCCCTTACCTCT					
-MEXICO	GA TC CGCGG GC AT T CGCGG CAGTATAA T TC AC TC CCCCT AC TC GATTCTCGCGGTGCAATTCTACGCGCCAGTATAAATTTGTCTACTTACCCCTGACATCC					
	5590v	5600v	5610v	5620v	5630v	5640v
-BURMA	TCCGTGGCCACCGGCACTAACCTGGTTCTTTATGCCGCCCTCTTAGTCCGCTTTTACCC					
-MEXICO	TC GTGGCC C GGCACTAA T GT CT TATGC GCCCC CTTA TCCGC T T CC TCTGTGGCCTCTGGCACTAAATTTAGTCCTGTATGCAGCCCCCTTAATCCGCTCTGCCG					

Fig. 2A

	5650v	5660v	5670v	5680v	5690v	5700v
-BURMA	CTTCAGGACGGCACCAATACCCATATAATGGCCACGGAAGCTTCTAAATTATGCCCAGTAC					
	CT CAGGACGG AC AATAC CA AT ATGGCCAC GA GC TC AATTATGC CAGTAC					
-MEXICO	CTGCAGGACGGTACTAATACTCACATTATGGCCACAGAGGCCTCCAATTATGCACAGTAC					
	5710v	5720v	5730v	5740v	5750v	5760v
-BURMA	CGGGTTGCCCCGTGCCACAATCCGTTACCGCCCGCTGGTCCCCAATGCTGTGGCGGTTAC					
	CGGGTTGCCCCG GC AC ATCCGTTACCG CC CT GT CC AATGC GT GG GG TA					
-MEXICO	CGGGTTGCCCCGCGCTACTATCCGTTACCGGCCCTAGTGCCTAATGCAGTTGGAGGCTAT					
					trpE- (C2) I->	
	5770v	5780v	5790v	5800v	5810v	5820v
-BURMA	GCCATCTCCATCTCATTCTGGCCACAGACCACCACCACCCGACGTCCTGATATGAAT					
	GC AT TCCAT TC TTCTGGCC CA AC ACCAC ACCCC AC TC GTTGA ATGAAT					
-MEXICO	GCTATATCCATTTCCTTCTGGCCTCAAACAACCACAACCCCTACATCTGTTGACATGAAT					
	5830v	5840v	5850v	5860v	5870v	5880v
-BURMA	TCAATAACCTCGACGGATGTTCTGATTTTAGTCCAGCCCGGCATAGCCTCTGAGCTTGTG					
	TC AT AC TC AC GATGT G ATT T GT CA CC GGCATAGC TCTGA T GT					
-MEXICO	TCCATTACTTCCACTGATGTCAGGATTCTTGTTCAACCTGGCATAGCATCTGAATTGGTC					
	5890v	5900v	5910v	5920v	5930v	5940v
-BURMA	ATCCCAAGTGAGCGCCTACACTATCGTAACCAAGGCTGGCGCTCCGTCGAGACCTCTGGG					
	ATCCCAAG GAGCGCCT CACTA CG AA CAAGG TGGCGCTC GT GAGAC TCTGG					
-MEXICO	ATCCCAAGCGAGCGCCTTCACTACCGCAATCAAGGTTGGCGCTCGGTTGAGACATCTGGT					
	5950v	5960v	5970v	5980v	5990v	6000v
-BURMA	GTGGCTGAGGAGGAGGCTACCTCTGGTCTTGTTATGCTTTGCATACATGGCTCACTCGTA					
	GT GCTGAGGAGGA GC ACCTC GGTCTTGT ATG T TGCATACATGGCTC C GT					
-MEXICO	GTTGCTGAGGAGGAAGCCACCTCCGGTCTTGTCATGTTATGCATACATGGCTCTCCAGTT					
	6010v	6020v	6030v	6040v	6050v	6060v
-BURMA	AATTCTTATACTAATAACCCCTATACCGGTGCCCTCGGGCTGTTGGACTTTGCCCTTGAG					
	AA TCCTATAC AATAC CC TATACCGGTGCCCT GG T TGGACTTTGCC T GAG					
-MEXICO	AACTCTTATACCAATACCCCTTATACCGGTGCCCTTGGCTTACTGGACTTTGCCTTAGAG					
	6070v	6080v	6090v	6100v	6110v	6120v
-BURMA	CTTGAGTTTCGCAACCTTACCCCGGTAACACCAATACGCGGGTCTCCCGTTATTCCAGC					
	CTTGAGTTTCGCAA CT ACC CC GTAACACCAATAC CG GT TCCCGTTA TCCAGC					
-MEXICO	CTTGAGTTTCGCAATCTCACCACCTGTAACACCAATACACGTGTGTCCCGTTACTCCAGC					
			I-SG3-->			
	6130v	6140v	6150v	6160v	6170v	6180v
-BURMA	ACTGCTCGCCACCGCCTTCGTGCGGGTGGGACGGGACTGCGGAGCTCACCACCACGGCT					
	ACTGCTCG CAC C CG G G GACGGGACTGC GAGCT ACCAC AC GC					
-MEXICO	ACTGCTCGTCACTCCGCCCGAGGGGCC---GACGGGACTGCGGAGCTGACCACAACCTGCA					

Fig. 2B

	6190v	6200v	6210v	6220v	6230v	6240v
-BURMA	GCTACCCGCTTTATGAAGGACCTCTATTTTACTAGTACTAATGGTGTGCGGTGAGATCGGC					
-MEXICO	GC ACC G TT ATGAA GA CTC A TTTAC G TAATGG GT GGTGA TCGGC GCCACCAGGTTTCATGAAAGATCTCCACTTTACCGGCCTTAATGGGGTAGGTGAAGTCGGC					
	6250v	6260v	6270v	6280v	6290v	6300v
-BURMA	CGCGGGATAGCCCTCACCCCTGTTCAACCTTGCTGACACTCTGCTTGGCGGCCTGCCGACA					
-MEXICO	CGCGGGATAGC CT AC T T AACCTTGCTGACAC CT CT GGCGG CT CCGACA CGCGGGATAGCTCTAACATTACTTAACTTGCTGACACGCTCCTCGGCGGGCTCCCGACA					
	6310v	6320v	6330v	6340v	6350v	6360v
-BURMA	GAATTGATTTTCGTGCGGCTGGTGGCCAGCTGTTTCTACTCCCGTCCCGTTGTCTCAGCCAAT					
-MEXICO	GAATT ATTTTCGTGCGGCTGG GG CA CTGTT TA TCCCG CC GTTGTCTCAGCCAAT GAATTAAATTTTCGTGCGGCTGGCGGGCAACTGTTTTATTCCCGCCCGGTTGTCTCAGCCAAT					
	6370v	6380v	6390v	6400v	6410v	6420v
-BURMA	GGCGAGCCGACTGTTAAGTTGTATACATCTGTAGAGAATGCTCAGCAGGATAAGGGTATT					
-MEXICO	GGCGAGCC AC GT AAG T TATACATC GT GAGAATGCTCAGCAGGATAAGGGT TT GGCGAGCCAACCGTGAAGCTCTATACATCAGTGGAGAATGCTCAGCAGGATAAGGGTGT					
	6430v	6440v	6450v	6460v	6470v	6480v
-BURMA	GCAATCCCGCATGACATTGACCTCGGAGAATCTCGTGTGGTTATTCAGGATTATGATAAC					
-MEXICO	GC ATCCC CA GA AT GA CT GG GA TC CGTGTGGT ATTCAGGATTATGA AAC GCTATCCCCACGATATCGATCTTGGTGATTTCGCGTGTGGTCATTTCAGGATTATGACAAC					
	6490v	6500v	6510v	6520v	6530v	6540v
-BURMA	CAACATGAACAAGATCGGCCGACGCCTTCTCCAGCCCCATCGCGCCCTTTCTCTGTCCCTT					
-MEXICO	CA CATGA CA GATCGGCC AC CC TC CC GC CCATC CG CTTT TCTGT CT CAGCATGAGCAGGATCGGCCACCCCGTGCCTGCGCCATCTCGGCCTTTTTCTGTCTC					
	6550v	6560v	6570v	6580v	6590v	6600v
-BURMA	CGAGCTAATGATGTGCTTTGGCTCTCTCTCACCGCTGCCGAGTATGACCAGTCCACTTAT					
-MEXICO	CGAGC AATGATGT CTTTGGCT TC CTCAC GC GCCGAGTATGACCAGTCCACTTA CGAGCAAATGATGTACTTTGGCTGTCCCTCACTGCAGCCGAGTATGACCAGTCCACTTAC					
	6610v	6620v	6630v	6640v	6650v	6660v
-BURMA	GGCTCTTCGACTGGCCAGTTTATGTTTCTGACTCTGTGACCTTGGTTAATGTTGCGACC					
-MEXICO	GG TC TC ACTGGCCC GTTTAT T TC GAC GTGAC TTGGT AATGTTGCGAC GGGTGCTCAACTGGCCCGTTTATATCTCGGACAGCGTGACTTTGGTGAATGTTGCGACT					
	6670v	6680v	6690v	6700v	6710v	6720v
-BURMA	GGCGCGCAGGCCGTTGCCCGGTGCTCGATTGGACCAAGGTCACACTTGACGGTCGCCCC					
-MEXICO	GGCGCGCAGGCCGT GCCCG TCGCT GA TGG CCAA GTCAC CT GACGG CG CCC GGCGCGCAGGCCGTAGCCCGATCGCTTGACTGGTCCAAAGTCACCTTCGACGGGCGGCCC					
	6730v	6740v	6750v	6760v	6770v	6780v
-BURMA	CTCTCCACCATCCAGCAGTACTCGAAGACCTTCTTTGTCCGTCCGCGGTAAAGCTC					
-MEXICO	CTC C AC T AGCA TA TC AAGAC TTTTGT CT CC CT CG GG AAGCTC CTCCCGACTGTTGAGCAATATTCCAAGACATTCTTTGTGCTCCCCCTTCGTGGCAAGCTC					

Fig. 2C

6790v 6800v 6810v 6820v 6830v 6840v
 -BURMA TCTTTCTGGGAGGCAGGCACAACCTAAAGCCGGGTACCCTTATAATTATAACACCACTGCT
 -MEXICO TC TT TGGGAGGC GGCACAAC AAAGC GG TA CCTTATAATTATAA AC ACTGCT
 TCCTTTTGGGAGGCCGGCACAACAAAGCAGGTTATCCTTATAATTATAATACTACTGCT

6850v 6860v 6870v 6880v 6890v 6900v
 -BURMA AGCGACCAACTGCTTGTGCGAGAATGCCGCCGGGCACCGGGTCGCTATTTCCACTTACACC
 -MEXICO AG GACCA T CT T GA AATGC GCCGG CA CGGGTCGC ATTTC AC TA ACC
 AGTGACCAGATTCTGATTGAAAATGCTGCCGGCCATCGGGTCGCCATTTCAACCTATAACC

6910v 6920v 6930v 6940v 6950v 6960v
 -BURMA ACTAGCCTGGGTGCTGGTCCCGTCTCCATTTCTGCGGTTGCCGTTTTAGCCCCCACTCT
 -MEXICO AC AG CT GG GC GGTCC GTC CCATTTCTGCGG GC GTTTC GC CC C CTC
 ACCAGGCTTGGGGCCGGTCCGGTCCGCTATTTCTGCGGCCGCGGTTTTGGCTCCACGCTCC

I-406.3-2-->
 6970v 6980v 6990v 7000v 7010v 7020v
 -BURMA GCGCTAGCATTGCTTGAGGATACCTTGGACTACCCTGCCCGCGCCCATACITTTTGATGAT
 -MEXICO GC CT GC TGCT GAGGATAC TT GA TA CC G CG GC CA AC TTTGATGA
 GCCCTGGCTCTGCTGGAGGATACTTTTGATTATCCGGGGCGGGCGCACACATTTGATGAC

7030v 7040v 7050v 7060v 7070v 7080v
 -BURMA TTCTGCCCAGAGTGCCGCCCCCTTGGCCTTCAGGGCTGCGCTTTCCAGTCTACTGTGCGCT
 -MEXICO TTCTGCCC GA TGCCGC C T GGCCT CAGGG TG GCTTTCCAGTC ACTGTGCGCT
 TTCTGCCCTGAATGCCGCGCTTTAGGCCTCCAGGGTTGTGCTTTCCAGTCAACTGTGCGCT

<--SG3-I
 <--406.3-2-I
 7090v 7100v 7110v 7120v 7130v 7140v
 -BURMA GAGCTTCAGCGCCTTAAGATGAAGGTGGGTAAAACTCGGGAGTTGTAGTTTATTTGCTTG
 -MEXICO GAGCT CAGCGCCTTAA T AAGGTGGGTAAAACTCGGGAGTTGTAGTTTATTTG TG
 GAGCTCCAGCGCCTTAAAGTTAAGGTGGGTAAAACTCGGGAGTTGTAGTTTATTTGGCTG

7150v 7160v 7170v 7180v 7190v
 -BURMA TGCCCCCCTTCTTTCTGTTGC-----TTATTTCTCATTTCTGCGTTCCGCGCTCCC
 -MEXICO TGCCC CCT CTT TGC TTATTTT TTTCT GT CCGCGCTCCC
 TGCCCACCTACTTATATCTGCTGATTTCCCTTTATTTCCCTTTTTCTCGGTCCCGCGCTCCC

<-I ORF2 <-I trpE-C2
 v 7195
 -BURMA TGA
 -MEXICO TGA

Fig. 2D

	10	20	30	40	50	60
HEV (B)	MNNMSFAAPMGSRPCALGLFCCCSSCFCLCCPRHRPVSRLAAVVGGAAAVPAVSGVTGL					
	X:::	:	:	:	:	:
HEV (M)	MNNMWFAAPMGSPPCALGLFCCCSSCFCLCCPRHRPVSRLAAVVGGAAAVPAVSGVTGL					
	10	20	30	40	50	60

		406.4-2				
	70	80	90	100	110	120
HEV (B)	ILSPSQSPIFIQPTSPSPMSPLRPGLDLVFANPPDHSAPLGVTTRPSAPPLPHVVDLPQLG					
	:	:	:	:	:	:
HEV (M)	ILSPSQSPIFIQPTPLPQTLPLRPGLDLAFANQPGHLAPLGEIRPSAPPLPPVADLPQPG					
	70	80	90	100	110	120

HEV (B) PRRZ
 ::X
 HEV (M) LRRZ

Fig. 3

	10	20	30	40	50	60
HEV (B)	MRPRPILLLLMLFLPMLPAPPPGQPSGRRRGRRSGGSGGGFWGDRVDSQPFAIPYIHPTN					
	X::					
HEV (M)	MRPRPLLLLFLFLPMLPAPPTGQPSGRRRGRRSGGTGGGFWGDRVDSQPFAIPYIHPTN					
	10	20	30	40	50	60

				62K	
	70	80	90	100	120
HEV (B)	PFAPDVTAAGAGPRVRQPARPLGSAWRDQAQRPAVASRRRPTTAGAAPLTAVAPAHDTF				
	::				
HEV (M)	PFAPDVAAASGSGPRLRQPARPLGSTWRDQAQRPSAASRRRPATAGAAALTAVAPAHDTF				
	70	80	90	100	120

	130	140	150	160	170	180
HEV (B)	FVPDVDSRGAILRRQYNLSTSPILTSSVATGTNLVLYAAPLSPLLPLQDGTINTHIMATEAS					
	::					
HEV (M)	FVPDVDSRGAILRRQYNLSTSPILTSSVAGTNLVLYAAPLNPPPLPLQDGTINTHIMATEAS					
	130	140	150	160	170	180

			C-2		
	190	200	210	220	240
HEV (B)	NYAQYRVARATIRYRPLVPNAVGGYAISISFWPQTTTTPTSVDMNSITSTDVRILVQPGI				
	::				
HEV (M)	NYAQYRVARATIRYRPLVPNAVGGYAISISFWPQTTTTPTSVDMNSITSTDVRILVQPGI				
	190	200	210	220	240

	250	260	270	280	290	300
HEV (B)	ASELVIPSERLHYRNQWRSVETSGVAEEEEATSGLVMLCIHGSLVNSYNTNTPYTGAIGLL					
	::					
HEV (M)	ASELVIPSERLHYRNQWRSVETSGVAEEEEATSGLVMLCIHGSPVNSYNTNTPYTGAIGLL					
	250	260	270	280	290	300

			SG3		
	310	320	330	340	360
HEV (B)	DFALELEFRNLTPGNTINTRVSRYSSTARHRLRGADGTAEITTTAATRFMKDLYFTSTNG				
	::				
HEV (M)	DFALELEFRNLTTCTNINTRVSRYSSTARHS-ARGADGTAEITTTAATRFMKDLHFTGLNG				
	310	320	330	340	350

	370	380	390	400	410	420
HEV (B)	VGEIGRGIALTLFNLADTLTGGLPTELISSAGGQLFYSRPVVSANGEPTVKLYTSVENAQ					
	::					
HEV (M)	VGEVGRGIALTLLNLADTLTGGLPTELISSAGGQLFYSRPVVSANGEPTVKLYTSVENAQ					
	360	370	380	390	400	410

	430	440	450	460	470	480
HEV (B)	QDKGIAIPHDIDLGESRVVIQDYDNQHEQDRPTSPAPSRPFSVLRANDVLWLSLTAAEY					
	::					
HEV (M)	QDKGVAIPHDIDLGDSRVVIQDYDNQHEQDRPTSPAPSRPFSVLRANDVLWLSLTAAEY					
	420	430	440	450	460	470

Fig. 4A

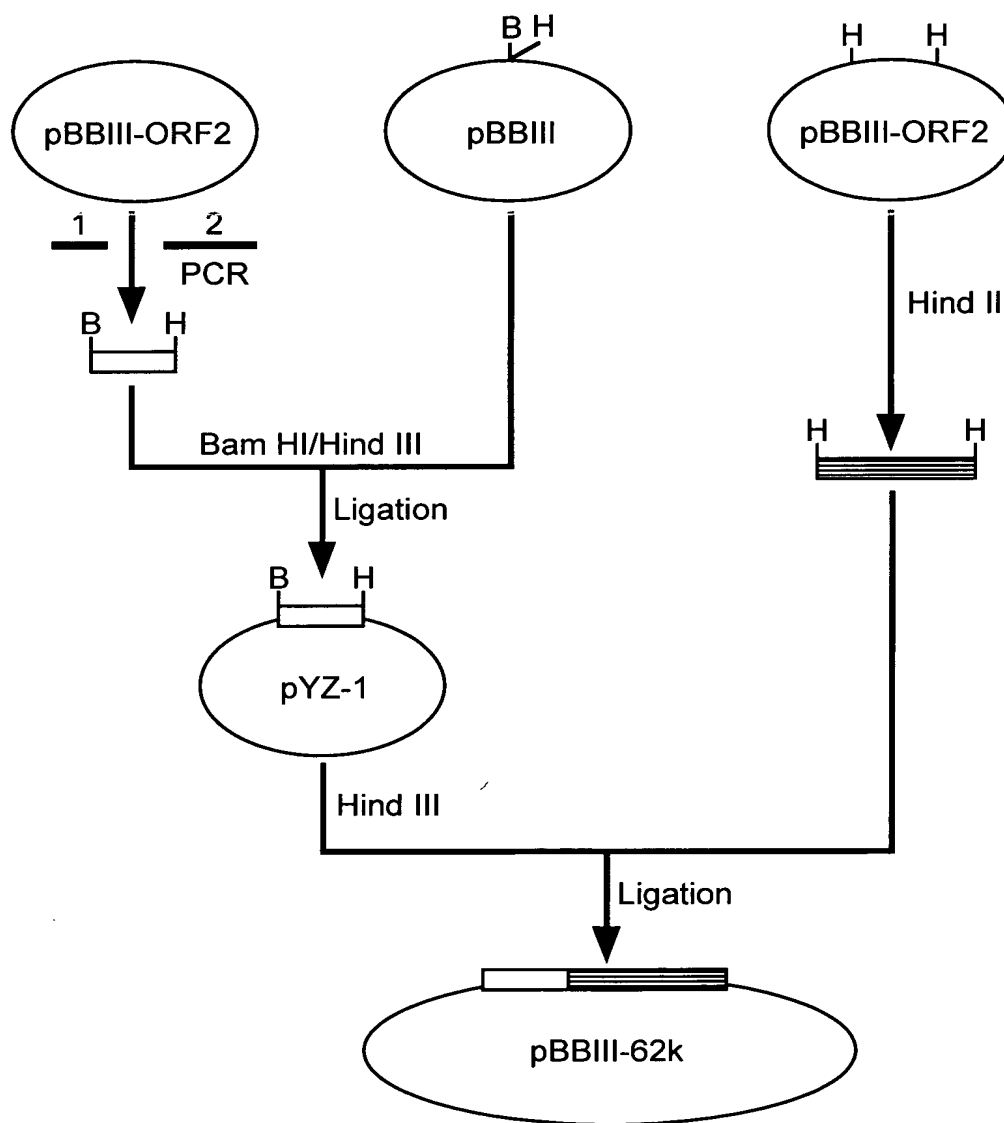


Fig. 5

092000-0101
F01210-59069260

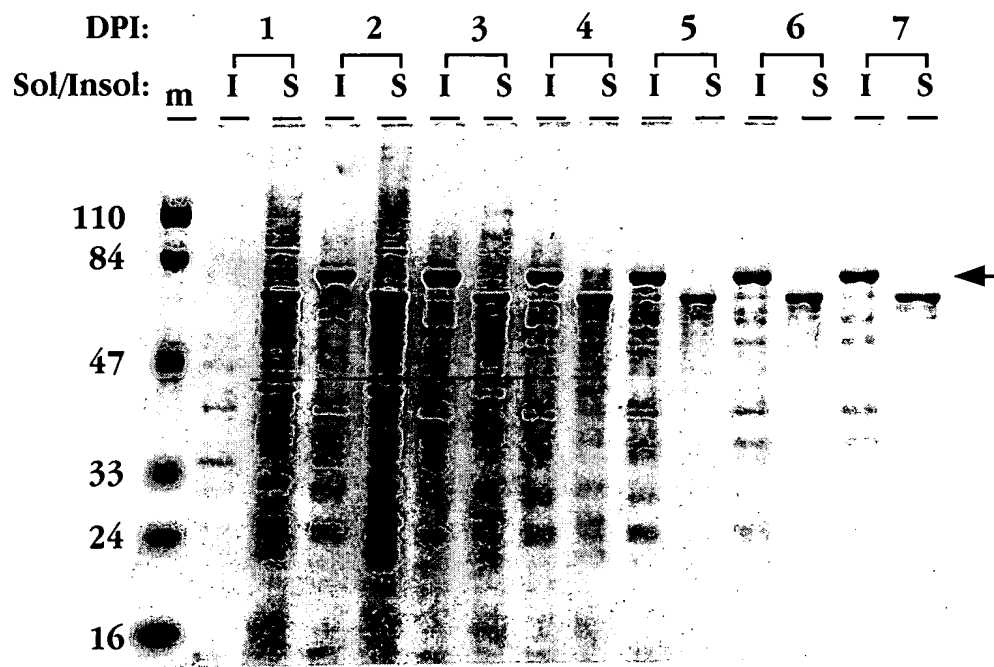


Fig. 6A

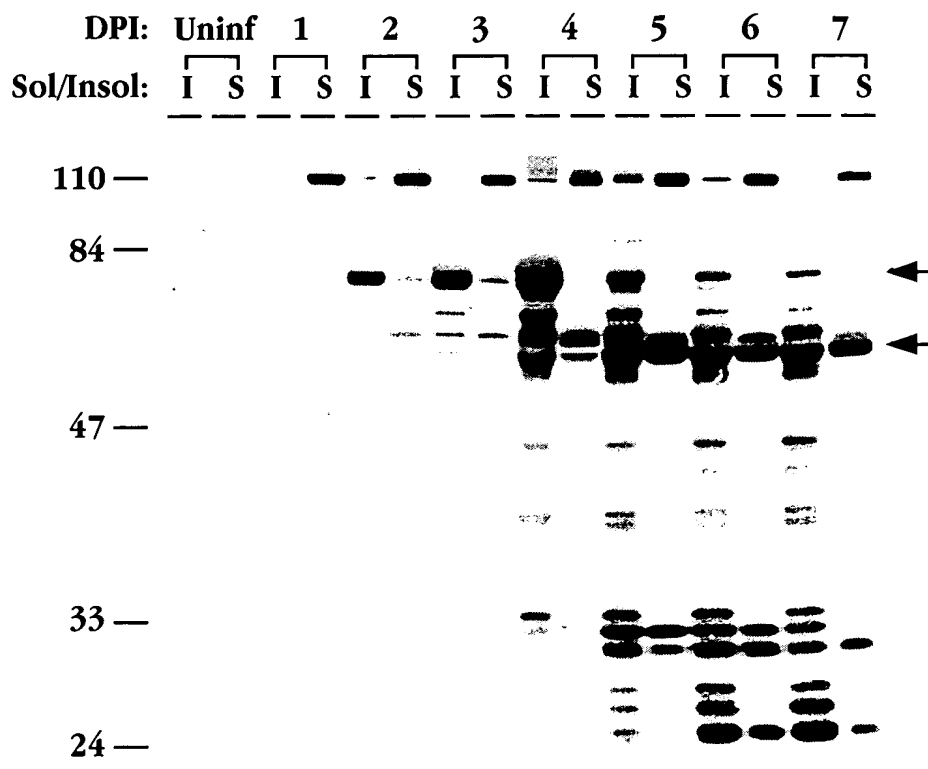


Fig. 6B

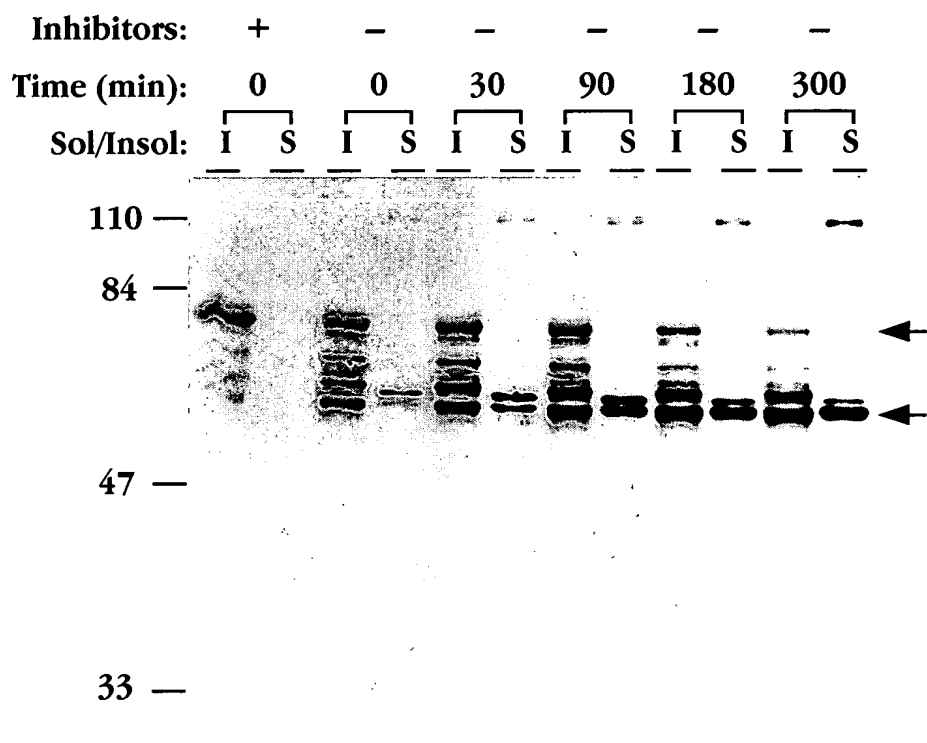


Fig. 7

09769066 0249
F01210 99069260

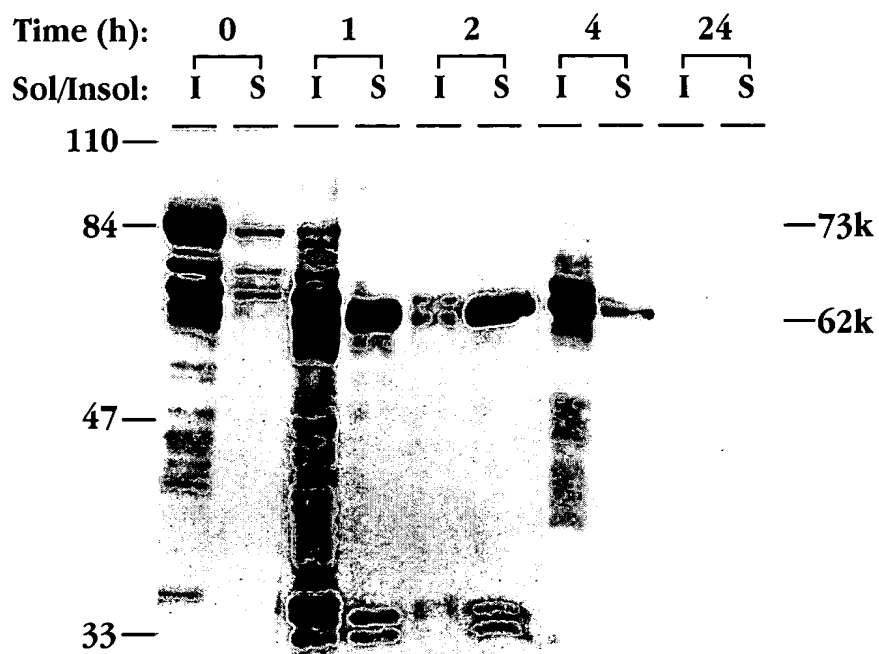


Fig. 8A

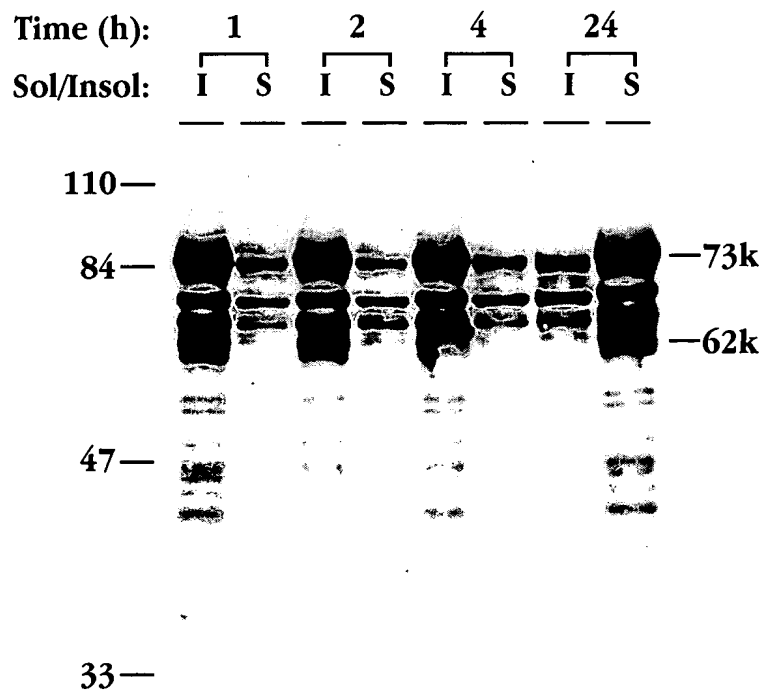


Fig. 8B

09069600-00000000

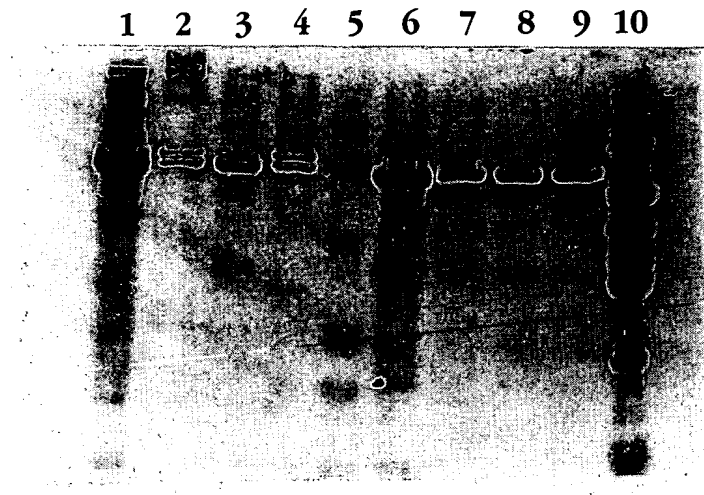


Fig. 9

SDS-PAGE

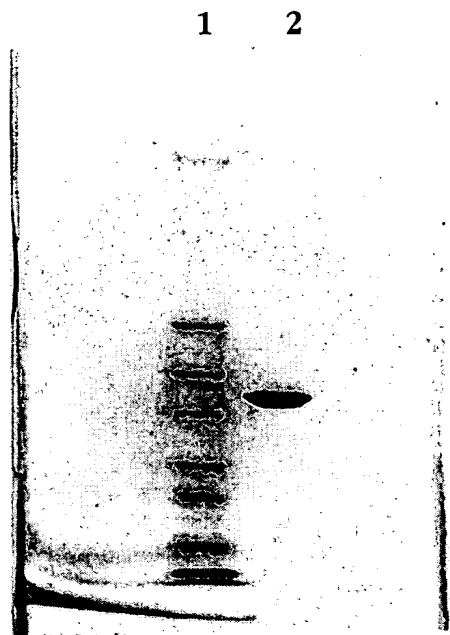


Fig. 10

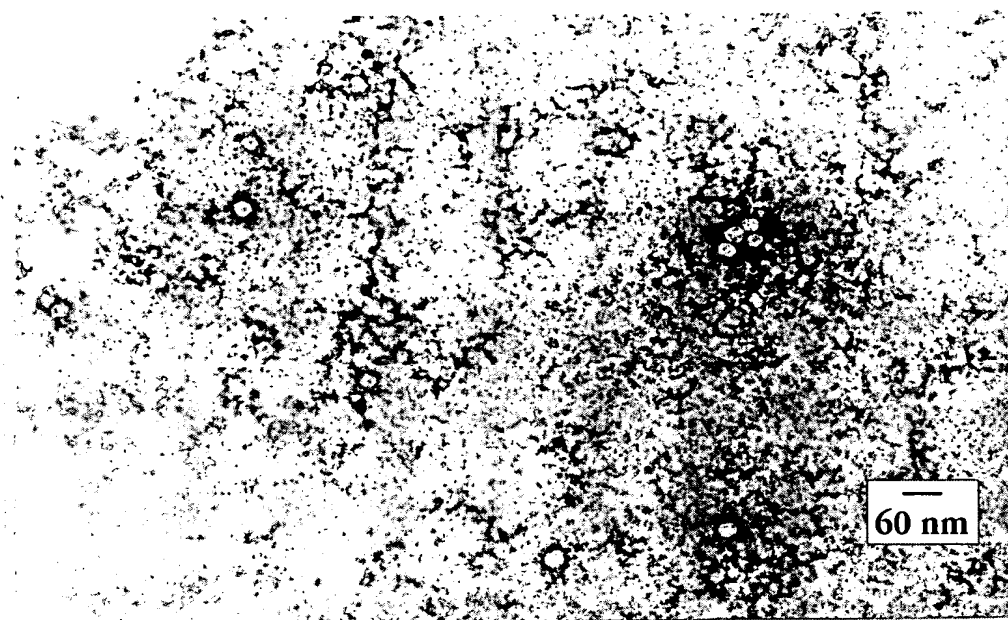


Fig. 11A

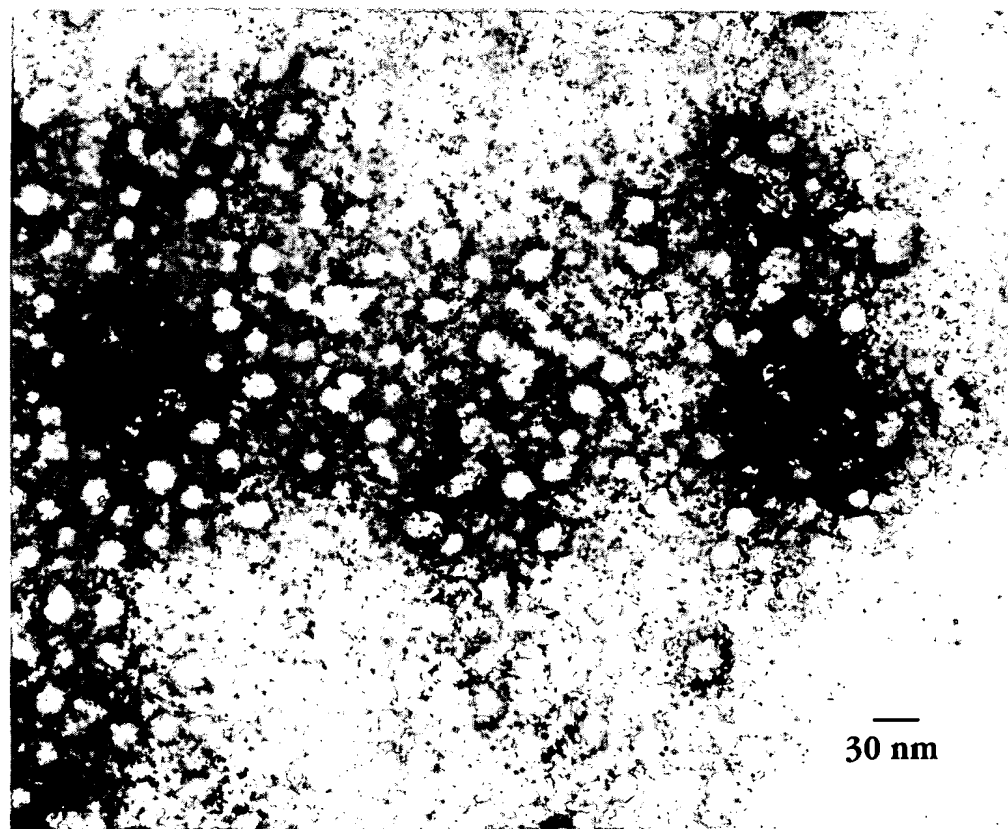


Fig. 11B

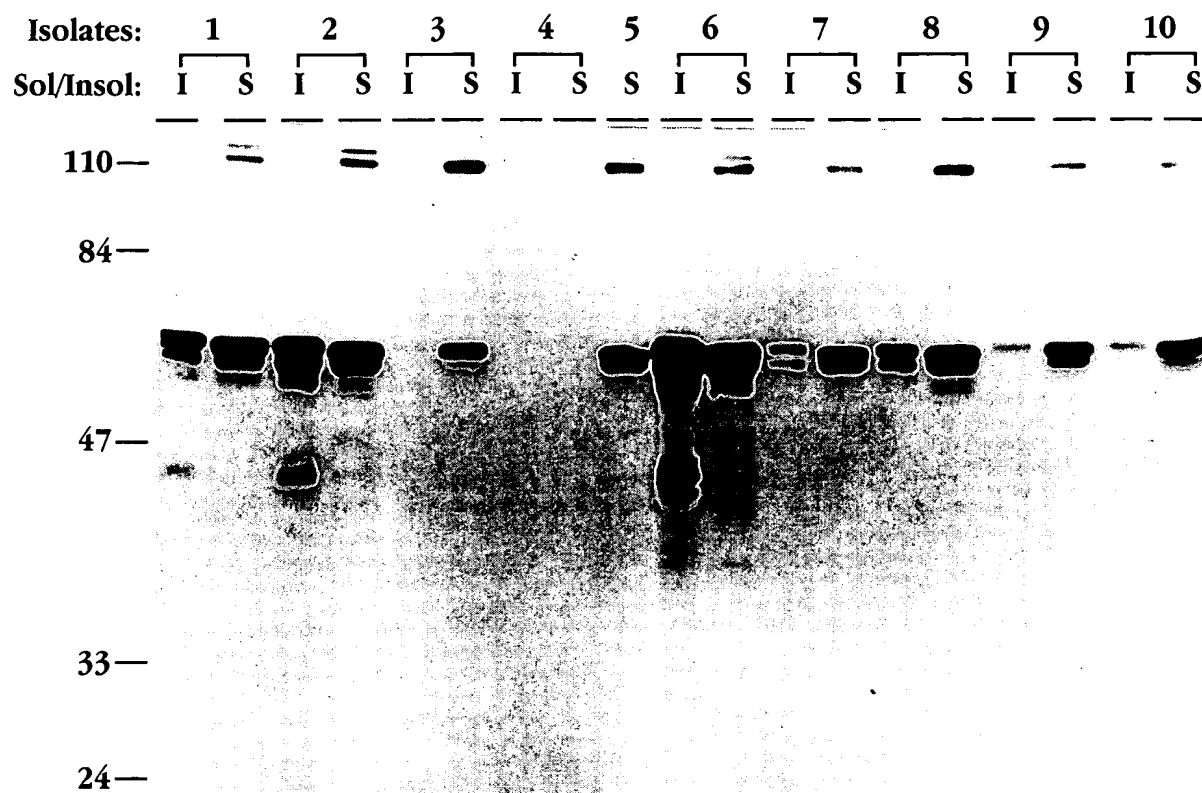


Fig. 12

101210" 99069400

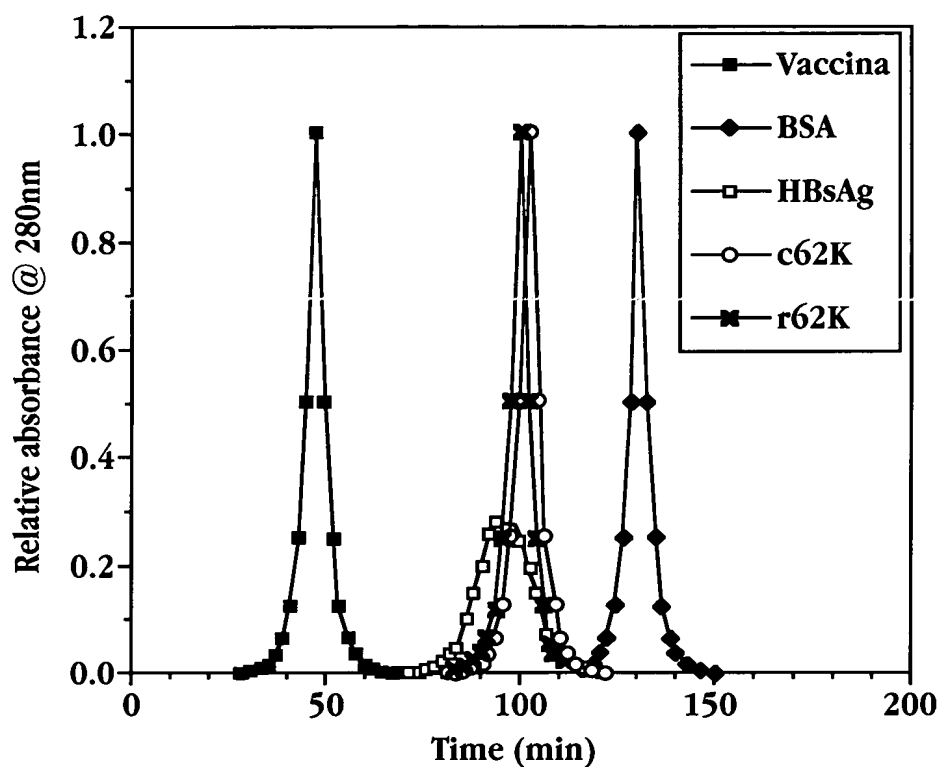


Fig. 13

	10	20	30
MEXICAN (SEQ ID NO:18)	ANQPGHLAPLGEIRPSAPPLPPVADLPQGLRR		

BURMA (SEQ ID NO:17)	ANPPDHSAPLGVTRPSAPPLPHVVDLPQLGPRR		
	10	20	30

Fig. 16

Fig. 14B

















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	Challenge - NV Cynos	
	N	
	Pre-Cy9327	
	Pre-Cy9330	
	N	
	Challenge - Cy9327	
	Challenge - Cy9330	
	N	
	Uninfected Control	
	Infected Control	
	Spike	
	N	
	1 fg (pos)	RNA Control
	10 fg (pos)	
	100 fg (neg)	

Fig. 15